

## Stage 1 Identify Desired Results

### Establish Goals: (G)

#### Common Core State Standards

**Content Area:** Statistics and Probability

**Grade Level:** High School 9-12

**Domain:** Making Inferences and Justifying Conclusions

**Standard:** Make inferences and justify conclusions from sample surveys, experiments and observational studies

**Cluster:** S-IC-3

**Content Area:** Statistics and Probability

**Grade Level:** High School 9-12

**Domain:** Interpreting Categorical and Quantitative Data

**Standard:** Summarize, represent and interpret data on two categorical and quantitative variables

**Cluster:** S-ID-6

**Content Area:** Functions

**Grade Level:** High School 9-12

**Domain:** Linear, Quadratic and Exponential Models

**Standard:** Construct and compare linear, quadratic and exponential models and solve problems

**Cluster:** F-LE-2

### *What understandings are desired?*

*Students will understand that: (U)*

- inferences are made from the data and conclusions need to be justified.
- to interpret data it needs to be organized and presented in graph form.
- a regression equation will model the data, help compare data and solve problems.

### *What essential questions will be considered?*

**Essential Questions: (Q)**

- How can conclusions be made from the trends in the data?
- Why is it best to organize data and represent it in a graph?
- How does a regression model help to solve problems?

### *What key knowledge and skills will students acquire as a result of this unit?*

*Students will know: (K)*

*Students will be able to: (S)*

- Key factual information: collect accurate data,
- predict trends based on the research.

create a scatter plot, develop a hypothesis, analyze data, and conclude from the data.

- Formulas: create multiple types of graphical displays, determine which type of graph best represents the data, calculate correlation, standard deviation and regression models.
- Important events and people: knowledge of the history of the immigrants, develop time lines, cause and effect of immigration, and able to make comparisons from the data models.

- make conclusions from the data.
- create and present the data in graphical form.
- analyze the data.
- imagine the plight of the people and why they immigrated to America.
- reflect on the regression model to compare data and solve problems.

## **2004 ASCD and Grant Wiggins and Jay McTighe**